# Transportation Safety Board of Canada

2016–17

**Report on Plans and Priorities**

Kathleen Fox
Chair
Transportation Safety Board of Canada

Dominic LeBlanc
Leader of the Government in the House of Commons
House of Commons

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# Chair's Message

At the Transportation Safety Board of Canada (TSB), our goal has always been straightforward: to advance transportation safety, from coast to coast to coast. That means investigating accidents in the Marine, Pipeline, Rail and Aviation modes, and then communicating what we learn to those best placed to take action. And while we're proud of what we've accomplished over the past 25 years, we know there's always more work to be done. That's why we continuously set new goals, constantly raising the bar so that Canadians can have the safest transportation system possible.

This year, our Report on Plans and Priorities features an ambitious slate of projects. We will be following up on what we learned from both the 2014 Public Service Employee Survey and the 2015 stakeholders' survey by taking concrete actions to address the key areas identified for improvement. This includes the implementation of a revised Occurrence Classification Policy, and the launch of a comprehensive review of our key business processes and safety products. Efforts will also be placed on improving our workplace. Other work will focus on the development and release of an updated TSB safety Watchlist; the completion of the joint safety study with Transport Canada looking into the installation and expanded use of voice and video recorders onboard locomotives; and the continued work on the Air Branch's Safety Issues Investigation (SII) into air taxi operations.

Moreover, as we do every year, we will continue to carry out rigorous independent investigations, while simultaneously looking for ways to improve efficiency. That includes completing our reports in a timelier manner, and sharing more of our data with Canadians as part of the Open Government Initiative. We'll also continue to meet with regulators and industry stakeholders to make sure that our findings and recommendations are not just heard, but acted upon.

Completing everything on this list will be a tall order, but that's our commitment to all Canadians: whether the journey is on our waterways, along our pipelines or railways, or in the sky—our dedicated employees are working hard to make transportation as safe as possible.

# Section I: Organizational Expenditure Overview

## Organizational Profile

**Appropriate Minister:** Dominic LeBlanc

**Institutional Head:** Kathleen Fox

**Ministerial Portfolio:** Privy Council

**Year established:** 1990

**Main legislative authority:**

*Canadian Transportation Accident Investigation and Safety Board Act*,[1] S.C. 1989, c. 3

## Organizational Context

### Raison d'être

The Canadian Transportation Accident Investigation and Safety Board is referred to as the Transportation Safety Board of Canada (TSB) in its day-to-day activities. The TSB is an independent agency created in 1990 by an Act of Parliament. It operates at arm's length from other government departments and agencies to ensure that there are no real or perceived conflicts of interest. The TSB's sole objective is to advance air, marine, rail and pipeline transportation safety. This mandate is fulfilled by conducting independent investigations into selected transportation occurrences to identify the causes and contributing factors, and the safety deficiencies evidenced by these occurrences. The TSB makes recommendations to reduce or eliminate any such safety deficiencies and reports publicly on its investigations. The TSB then follows up with stakeholders to ensure that safety actions are taken to reduce risks and improve safety.

The TSB may also represent Canadian interests in foreign investigations of transportation accidents involving Canadian registered, licensed or manufactured aircraft, ships or railway rolling stock. In addition, the TSB carries out some of Canada's obligations related to transportation safety at the International Civil Aviation Organization (ICAO) and the International Maritime Organization (IMO).

The Leader of the Government in the House of Commons is the designated minister for the purposes of tabling the TSB's administrative reports in Parliament, such as the *Report on Plans and Priorities* and *Departmental Performance Report*. The TSB forms part of the Privy Council portfolio of departments and agencies.

## Responsibilities

The TSB exists as an independent investigation body with the sole goal of advancing transportation safety. Since its inception in 1990, the TSB has conducted thousands of investigations across the transportation modes for which it is responsible.

The TSB is one of many Canadian and foreign organizations involved in improving transportation safety nationally and internationally. Because it has no formal authority to regulate, direct or enforce specific actions, the TSB can only succeed in fulfilling its strategic outcome through the actions of others. Operating at arm's length from other federal departments involved in the transportation field, the Board must present its findings and recommendations in such a manner that compels others to act. This implies ongoing dialogue, information sharing and strategic coordination with organizations such as Transport Canada, the National Energy Board and the Canadian Coast Guard. The TSB must also engage industry and foreign regulatory organizations in a similar fashion. Through various means, the TSB must present compelling arguments that will convince these "agents of change" to take action in response to identified safety deficiencies.

As one of the world leaders in its field, the TSB regularly shares its investigation techniques, methodologies and tools with foreign safety organizations by inviting them to participate in in-house training programs in the areas of investigation methodology and human and organizational factors. Under the terms of international agreements, the TSB also provides investigation assistance to foreign safety organizations, such as downloading and analyzing flight recorder data or overseeing engine tear-downs. The TSB also shares data and reports with sister organizations, in addition to participating in international working groups and studies to advance transportation safety.

For more details on the TSB investigation process or the links between the TSB and other federal organizations visit the TSB website.[8]

## Strategic Outcome and Program Alignment Architecture

The structure below illustrates the program activities framework that contributes to the achievement of the TSB strategic outcome.

1 **Strategic Outcome:** Independent investigations into transportation occurrences contribute to making the transportation system safer

- 1.1 **Program:** Aviation Occurrence Investigations
- 1.2 **Program:** Marine Occurrence Investigations
- 1.3 **Program:** Rail Occurrence Investigations
- 1.4 **Program:** Pipeline Occurrence Investigations

**Internal Services**

## Organizational Priorities

The TSB Strategic Plan[iii] outlines the strategic objectives and associated priorities that have been identified by senior management for the period of 2016-17 to 2020-21 in order to achieve its strategic outcome. This plan provides the framework that guides the identification of key activities and the TSB's investment decision-making for the next five years.

The TSB will be focusing on four strategic objectives: serving, improving, modernizing and updating. In essence, as the department continues to investigate occurrences and to advance transportation safety, concerted efforts will be made to adjust the organization and the way it conducts its business to ensure that the TSB can continue to be relevant and effective in fulfilling its mandate in the future.

### Priority: Serving

The TSB will continue serving Canadians by conducting thorough investigations and safety studies, identifying risks, communicating lessons learned, sharing information openly, and advocating for changes that advance transportation safety.

*Priority Type*: [1] New and On-going

1- *New* —newly committed to in the reporting year of the RPP or the DPR. *Ongoing* - committed to at least three fiscal years prior to the subject year of the report.

### Key Supporting Initiatives

| Planned Initiatives | Start Date | End Date | Link to Department's Program Alignment Architecture |
|---|---|---|---|
| 1 – Continue to improve our information management practices. | April 2014 | March 2019 | • Air Occurrence Investigations<br>• Marine Occurrence Investigations<br>• Rail Occurrence Investigations<br>• Pipeline Occurrence Investigations |
| 2 – Engage stakeholders in safety studies and discussions on key safety issues. | May 2015 | March 2018 | |
| 3- Implement a robust project management methodology for all our investigations. | January 2016 | March 2018 | |
| 4- Increase the number of factual updates during investigations. | April 2016 | March 2017 | |
| 5- Implement a tracking system for all safety communications. | April 2016 | March 2019 | |
| 6 – Review and refine our communications products. | August 2016 | March 2019 | |

**Priority: Improving**

The TSB will improve its core business processes and products in order to ensure continued relevance, efficiency and effectiveness in a constantly evolving world.

*Priority Type:* [1] New

### Key Supporting Initiatives

| Planned Initiatives | Start Date | End Date | Link to Department's Program Alignment Architecture |
|---|---|---|---|
| 1- Implement new Occurrence Classification Policy | April 2016 | March 2017 | • Air Occurrence Investigations<br>• Marine Occurrence |

[1] New—newly committed to in the reporting year of the RPP or the DPR.

| | | | |
|---|---|---|---|
| 2 – Define and implement different and tailored investigation processes / timelines for each class of occurrences | April 2016 | December 2017 | Investigations<br>• Rail Occurrence Investigations<br>• Pipeline Occurrence Investigations |
| 3- Review, define and implement different and tailored investigation reports for each class of occurrences | April 2016 | December 2017 | |
| 4 -Review and update all other existing Board policies | August 2016 | March 2017 | |

**Priority: Modernizing**

The TSB will modernize its workplace to ensure that it has the best people working together in teams, making smart use of modern technologies, and achieving the best possible outcomes with efficient, interconnected and nimble processes, structures and systems.

*Priority Type:*[3] Ongoing and New

**Key Supporting Initiatives**

| Planned Initiatives | Start Date | End Date | Link to Department's Program Alignment Architecture |
|---|---|---|---|
| 1 – Develop and implement succession plans for all management positions | April 2015 | March 2017 | • Air Occurrence Investigations<br>• Marine Occurrence Investigations<br>• Rail Occurrence Investigations<br>• Pipeline Occurrence Investigations |
| 2 – Implement government-wide shared tools and systems | April 2015 | On-going | |
| 3- Review and update TSB business needs for office, laboratory and special purpose space. Modernize our facilities | October 2015 | March 2020 | |
| 4- Improve internal communications across the organization and create opportunities for greater | January 2016 | March 2018 | |

[3] New —newly committed to in the reporting year of the RPP or the DPR. Ongoing – committed to at least three fiscal years prior to the subject year of the report.

| | | | |
|---|---|---|---|
| employee consultation and engagement in decision-making | | | |
| 5- Maximize use of existing tools and systems and leverage new technologies to facilitate our work and improve efficiency | April 2010 | March 2019 | |

**Priority: Ongoing**
The TSB will review its legislative and regulatory frameworks to ensure that they are appropriate in the context of the evolving transportation industry and expectations of Canadians
*Priority Type*[8]: New

**Key Supporting Initiatives**

| Planned Initiatives | Start Date | End Date | Link to Department's Program Alignment Architecture |
|---|---|---|---|
| 1- Develop an action plan for the implementation of locomotive voice and video recorders (LVVR) | April 2010 | December 2010 | • Air Occurrence Investigations<br>• Marine Occurrence Investigations<br>• Rail Occurrence Investigations<br>• Pipeline Occurrence Investigations |
| 2- Conduct a review the TSB's enabling legislation (CTESRB) and identify areas for potential amendment | August 2010 | March 2017 | |

For more information on the TSB's organizational priorities, refer to the TSB's Strategic Plan[9] Given the TSB's independence, its activities are not covered in the Ministers' mandate letters on the Prime Minister of Canada's website.[10]

**Risk Analysis**

The TSB operates within the context of a very large and complex Canadian and international transportation system. The TSB's volume of activities is influenced by the number, severity and complexity of transportation occurrences that cannot effectively be predicted. This uncertainty

[8] New – newly committed to in the reporting year of the RPP or the DPR

pose certain challenges with respect to the planning and management of TSB resources. The TSB must be ready to respond to occurrences. Inadequate human resources or inexperienced personnel could impact the department's ability to meet urgent operational requirements and public expectations. The TSB's work is also fundamentally reliant on the collection, retention, management and analysis of occurrence information. The TSB must therefore ensure that information is complete, accurate, appropriately stored and readily accessible to employees who need it when they need it. Ineffective safeguarding, retention and retrieval of information also pose risks to the achievement of the TSB mandate.

The following tables summarize the TSB's most significant risks for 2010–17 and the related mitigation strategies.

### Key Risks

#### Managing Workload and Expectations in Changing Environment

| Risk | Risk Response Strategy | Link to Program Alignment Architecture |
|---|---|---|
| The TSB's volume of activities is influenced by the number, severity and complexity of transportation occurrences, and the volume cannot effectively be predicted. This uncertainty poses certain challenges with respect to the planning and management of TSB resources. Changing government priorities and fiscal restraints over the past number of years have also had an impact on the TSB's resources and its ability to deal with a heavy workload. The reduced resource levels provide less flexibility to deal with concurrent workload demands. There is a medium likelihood of a moderate impact on the TSB's ability to continue to effectively deliver its mandate and meet its obligations as a federal public service organization given limited financial resources, high public | The TSB will:<br><br>• Review and adjust key organizational performance targets in light of available resources and ensure the revised targets are broadly communicated to stakeholders and easily accessible to the public.<br><br>• Implement rigorous project management practices to ensure that investigations and key projects are completed in an effective, efficient and timely manner.<br><br>• Implement good employee performance management to ensure a balanced distribution of workload and that all employees contribute fully to the achievement of the TSB mandate. | • Air Occurrence Investigations<br>• Marine Occurrence Investigations<br>• Rail Occurrence Investigations<br>• Pipeline Occurrence Investigations |

| | | |
|---|---|---|
| expectations, changing government priorities, and other external changes beyond the TSB's control. | The TSB Executive Committee (EC) will monitor progress against the performance targets and the overall workload on a quarterly basis. The EC will regularly monitor resources and perform quarterly reallocations. | |

**Challenges to our Credibility**

| Risk | Risk Response Strategy | Link to Program Alignment Architecture |
|---|---|---|
| Historically, the TSB has worked quietly in the background taking the time required to conduct thorough investigations and shared information in its final investigation reports once the investigations were completed. However, expectations have changed considerably and people no longer want to wait for the completion of TSB investigations. The public/media want factual information on what happened within hours/days, and they expect progress reports on what we have found during the investigation. Key stakeholders want timely information for their own use within their Safety Management System programs. Litigants want timely information to file early lawsuits. The TSB must therefore adapt its business processes and share information more openly during the course of its investigations. Failure to do so could expose the TSB to challenges to its business processes due to the lack of transparency and limited sharing of information, which in turn could affect our reputation and credibility. There is a medium likelihood of the TSB's operational effectiveness and credibility being moderately impacted by a failure to | The TSB will:<br><br>• Review and update its investigation methodology, key business processes, the *Manual of Investigations*, as well as core investigator training.<br><br>• Explore the feasibility of modifying the *Canadian Transportation Accident Investigation and Safety Board Act* to permit the use of on-board recordings by operators in the context of their SMS programs.<br><br>• Continue to expand the type and amount of information released publicly during active investigations.<br><br>• Expand the proactive publication of data on the TSB web site.<br><br>The TSB Executive Committee will monitor this risk on a semi-annual basis. | • Air Occurrence Investigations<br>• Marine Occurrence Investigations<br>• Rail Occurrence Investigations<br>• Pipeline Occurrence Investigations |

| | | |
|---|---|---|
| adequately protect against the various types of challenges to the TSB's legislation, business processes and methodologies. | | |

### Maintaining a Knowledgeable Workforce

| Risk | Risk Response Strategy | Link to Program Alignment Architecture |
|---|---|---|
| The success of the TSB depends on the expertise, professionalism and competence of its employees. Many of the key positions at the TSB are "one deep" which means that there is only one person responsible for a specific task, with limited back-up. In addition, some of these key positions require strong combination of managerial and technical skills. Therefore, ineffective recruitment, development and/or retention of the TSB's workforce could pose a significant risk. There is a medium/low likelihood that the TSB will not be able to maintain a knowledgeable workforce which could result in a moderate negative impact on the TSB's reputation and/or ability to carry-out its mandate. | The TSB will continue to maintain its knowledge base and technical expertise through effective recruitment, training and development in order to mitigate this risk.<br><br>The TSB Executive Committee will monitor staffing turnover, training and other relevant human resources statistics to monitor for possible workforce issues and implement corrective action as required. | • Air Occurrence Investigations<br>• Marine Occurrence Investigations<br>• Rail Occurrence Investigations<br>• Pipeline Occurrence Investigations |

### Managing Information Effectively

| Risk | Risk Response Strategy | Link to Program Alignment Architecture |
|---|---|---|
| Ineffective safeguarding, retention and retrieval of information pose a risk to the achievement of the TSB mandate. The TSB's work is fundamentally reliant on the collection, retention, management and analysis of occurrence information. The TSB must therefore ensure that information is complete, accurate, appropriately stored and readily accessible to employees who need it when they | The TSB will continue to enhance the processes, tools and technology in support of the management of its information resources to mitigate the risk of losing critical information and corporate knowledge. In particular the TSB will increase its monitoring of information management | • Air Occurrence Investigations<br>• Marine Occurrence Investigations<br>• Rail Occurrence Investigations<br>• Pipeline Occurrence Investigations |

| | | |
|---|---|---|
| need it. There is a medium/low likelihood that gaps in the safeguarding, retention and retrieval of information could have a moderate impact on the TSB's ability to deliver its mandate in a timely and effective manner. | practices with respect to the classification, storage and retention of occurrence information with the objective of ensuring a consistent application.<br><br>The TSB Executive Committee will review the department's annual results of Treasury Board Secretariat's Record Keeping Assessment Tool to monitor its progress. | |

### Employee Wellbeing

| Risk | Risk Response Strategy | Link to Program Alignment Architecture |
|---|---|---|
| Due to the nature of the work performed by the TSB, employees may be subjected to workplace stress and emotional trauma. TSB investigators are regularly exposed to accident sites involving injury and death, as well as to direct interaction with distraught survivors and families of victims. The 2014 Public Service Employee Survey (PSES) results identified several areas where the workplace environment could be improved. Furthermore, despite the efforts made over the past few years, some risks remain with respect to employee occupational health and safety (OHS). There is a medium/low likelihood that continuing challenges related to workload, workplace environment and gaps in the occupational health and safety program could result in a moderate impact to the wellbeing of TSB employees. | The TSB has updated and implemented all key elements of the Occupational Health and Safety Program and Critical Incident Stress Management training has been delivered to all employees. The TSB has developed a PSES action plan to address workplace environment improvements.<br><br>The TSB Executive Committee will monitor employee wellbeing indicators through semi-annual updates provided by Human Resources and the National OHS Policy Committee. Corrective action will be prioritized and actioned. | ▸ Air Occurrence Investigations<br>▸ Marine Occurrence Investigations<br>▸ Rail Occurrence Investigations<br>▸ Pipeline Occurrence Investigations |

## Planned Expenditures

### Budgetary Financial Resources (dollars)

| 2016–17 Main Estimates | 2016–17 Planned Spending | 2017–18 Planned Spending | 2018–19 Planned Spending |
|---|---|---|---|
| 29,788,652 | 30,680,815 | 30,180,815 | 30,180,815 |

### Human Resources (Full-Time Equivalents [FTEs])

| 2016–17 | 2017–18 | 2018–19 |
|---|---|---|
| 220 | 220 | 220 |

### Budgetary Planning Summary for Strategic Outcome and Programs (dollars)

| Strategic Outcome, Programs and Internal Services | 2013–14 Expenditures | 2014–15 Expenditures | 2015–16 Forecast Spending | 2016–17 Main Estimates | 2016–17 Planned Spending | 2017–18 Planned Spending | 2018–19 Planned Spending |
|---|---|---|---|---|---|---|---|
| Strategic Outcome: Independent investigations into transportation occurrences contribute to making the transportation system safer | | | | | | | |
| Air Occurrence Investigations | 14,671,477 | 14,990,356 | 13,692,536 | 12,831,845 | 13,216,156 | 13,000,774 | 13,000,774 |
| Marine Occurrence Investigations | 5,457,349 | 4,934,356 | 5,250,934 | 5,089,370 | 5,241,795 | 5,156,371 | 5,156,371 |
| Rail Occurrence Investigations | 6,883,816 | 6,146,776 | 5,934,651 | 5,868,756 | 6,044,524 | 5,946,017 | 5,946,017 |
| Pipeline Occurrence Investigations | 353,442 | 283,717 | 309,515 | 277,784 | 286,104 | 281,441 | 281,441 |
| **Subtotal** | **27,366,084** | **26,355,205** | **25,187,636** | **24,067,755** | **24,788,579** | **24,384,603** | **24,384,603** |
| **Internal Services Subtotal** | **5,937,110** | **5,864,126** | **5,879,520** | **5,720,897** | **5,892,236** | **5,796,212** | **5,796,212** |
| **Total** | **33,303,194** | **32,219,331** | **31,067,156** | **29,788,652** | **30,680,815** | **30,180,815** | **30,180,815** |

The 2013-14 and 2014-15 expenditures presented above are actual results as presented in the Public Accounts of Canada. The TSB's spending in both years was higher than normal. In 2013-14, the increased spending was due mainly to the additional expenditures of $1.1 million for the

investigation of the Lac-Mégantic rail accident that occurred in July 2013. The 2014-15 expenditures were also high primarily due to two factors: a charge of $0.7 million to implement the payment of salaries in arrears by the Government of Canada, without impacting employees on salary at the date of implementation, and $0.4 million for payments for severance attributable to the liquidation of accumulated severance benefits as per changes to the collective agreements.

The 2015-16 forecast spending and future planned spending are anticipated to remain consistent with expenditures prior to 2013-14, however a significant transportation accident, a flurry of smaller size occurrences, or budget reductions could significantly change planned spending.

Forecast spending for 2015-16 includes appropriations received to date through Main Estimates, plus actual and estimated amounts for paylist items, respendable revenue and compensation adjustments for terminable allowances. A Government-wide operating budget freeze was in effect for fiscal years 2014-15 and 2015-16 and the TSB must absorb any economic salary increases once collective agreements for those periods are finalized. The TSB has consequently earmarked $0.5 million of carry-forward appropriations for this anticipated expenditure.

The 2016-17 and ongoing amounts include anticipated amounts from Main Estimates, plus respendable revenue and compensation adjustments for terminable allowances. The amount for 2016-17 in particular also includes the anticipated carry forward from 2015-16 of $0.5 million.

## Alignment of Spending With the Whole-of-Government Framework

**Alignment of 2016–17 Planned Spending With the Whole-of-Government Framework[vi] (dollars)**

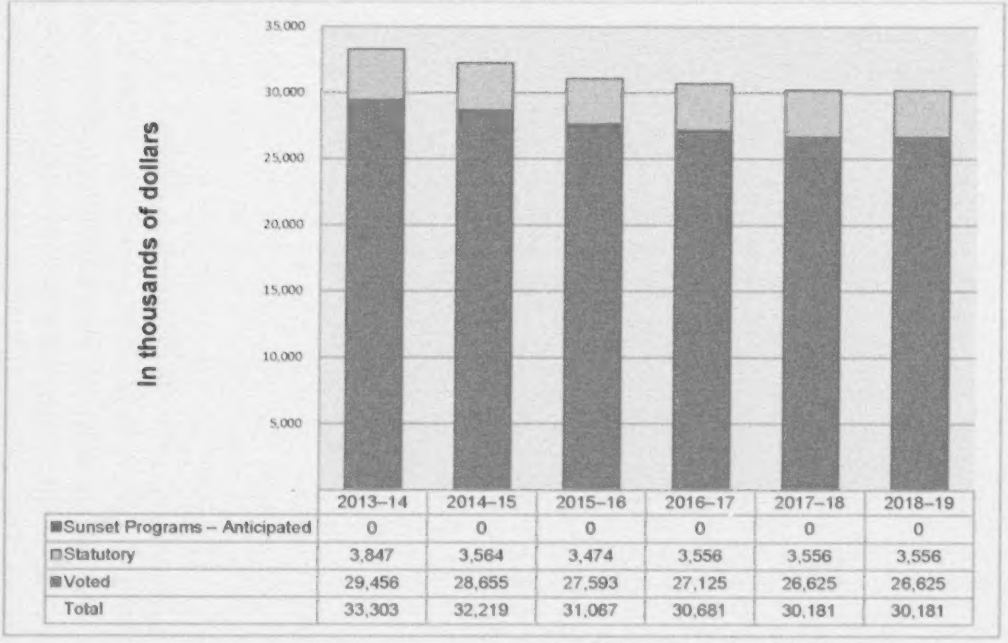
| Strategic Outcome | Program | Spending Area | Government of Canada Outcome | 2016–17 Planned Spending |
|---|---|---|---|---|
| Independent investigations into transportation occurrences contribute to making the transportation system safer | 1.1 Aviation Occurrence Investigations | Social Affairs | A safe and secure Canada | 13,216,156 |
| | 1.2 Marine Occurrence Investigations | Social Affairs | A safe and secure Canada | 5,241,795 |

| | | | | |
|---|---|---|---|---|
| | 1.3 Rail Occurrence Investigations | Social Affairs | A safe and secure Canada | 6,044,524 |
| | 1.4 Pipeline Occurrence Investigations | Social Affairs | A safe and secure Canada | 286,104 |

### Total Spending by Spending Area (dollars)

| Spending Area | Total Planned Spending |
|---|---|
| Social Affairs | 24,788,579 |

## Departmental Spending Trend




| | 2013–14 | 2014–15 | 2015–16 | 2016–17 | 2017–18 | 2018–19 |
|---|---|---|---|---|---|---|
| Sunset Programs – Anticipated | 0 | 0 | 0 | 0 | 0 | 0 |
| Statutory | 3,847 | 3,564 | 3,474 | 3,556 | 3,556 | 3,556 |
| Voted | 29,456 | 28,655 | 27,593 | 27,125 | 26,625 | 26,625 |
| Total | 33,303 | 32,219 | 31,067 | 30,681 | 30,181 | 30,181 |

## Estimates by Vote

For information on TSB's organizational appropriations, consult the 2016–17 Main Estimates.[vii]

# Section II: Analysis of Programs by Strategic Outcome

## Strategic Outcome: Independent investigations into transportation occurrences contribute to making the transportation system safer

**Programs**

As shown in the 2016-17 Main Estimates, the TSB has the following four key programs:

- Aviation Occurrence Investigations
- Marine Occurrence Investigations
- Rail Occurrence Investigations
- Pipeline Occurrence Investigations

## Program 1.1: Aviation Occurrence Investigations

### Description

The Aviation Occurrence Investigations program is governed by the *Canadian Transportation Accident Investigation and Safety Board Act*, the *Transportation Safety Board Regulations*, and Annex 13 of the *Convention on International Civil Aviation*. Under this program, the TSB conducts independent investigations into selected aviation transportation occurrences in, or over Canada, and in certain circumstances internationally, to identify causes and contributing factors. This program includes the publication of investigation reports, the formulation and monitoring of recommendations and other safety communications, as well as the conduct of outreach activities to advocate for changes to operating practices, equipment, infrastructure, and legislation to advance transportation safety. The Aviation Occurrence Investigations program also includes the fulfillment of specific Government of Canada obligations related to transportation safety under conventions of the International Civil Aviation Organization and other international agreements.

### Budgetary Financial Resources (dollars)

| 2016–17 Main Estimates | 2016–17 Planned Spending | 2017–18 Planned Spending | 2018–19 Planned Spending |
|---|---|---|---|
| 12,831,845 | 13,216,156 | 13,000,774 | 13,000,774 |

### Human Resources (Full-Time Equivalents [FTEs])

| 2016–17 | 2017–18 | 2018–19 |
|---|---|---|
| 89 | 89 | 89 |

### Performance Measurement

| Expected Results | Performance Indicators | Targets | Date to Be Achieved |
|---|---|---|---|
| Aviation occurrence investigations are efficient | Average time for completing investigation reports | 450 days | March 31, 2018 |
| | Percentage of investigations completed within the published target time | 65% | March 31, 2018 |
| Safety deficiencies in the aviation industry are addressed | Percentage of responses to recommendations assessed as Fully Satisfactory (since TSB's creation) | 65% | March 31, 2017 |
| | Percentage of safety advisories on which safety actions have been taken | 60% | March 31, 2017 |
| | Average time recommendations have been outstanding (active and dormant recommendations) | 7 years | March 31, 2018 |
| Aviation transportation system is safer | Aviation accident rate (over 10-year period) | Continue downward trend in accident rate | March 31, 2017 |
| | Number of fatal aviation accidents (over 10-year period) | Reduction in number of fatalities | March 31, 2017 |

## Planning Highlights

In 2016-17, the TSB will continue to face significant challenges in achieving its performance targets for the timely completion of investigation reports in the Air Occurrence Investigations program. Over the past year a review of the investigation process was undertaken and a work plan has been developed to improve the efficiency and timeliness of the process. Some changes were introduced during 2015-16 but further changes are needed. A formal project management methodology and enhanced measures for tracking of the progression of investigations will be implemented in 2016-17. Investments in employee training will continue to be made. Some measurable progress towards the achievement of the report timeliness targets is therefore expected in 2016-17 while the various changes are implemented but it is unlikely that the TSB will fully achieve these targets before March 31, 2018.

Little progress has been made on the achievement of the *percentage of responses to recommendations assessed as fully satisfactory*. Progress is very slow due to the systemic nature and complexity of some of the issues to be addressed, the complexity of the regulatory process, the need to harmonize standards with other countries, as well as the lack of buy-in from the regulators and industry stakeholders. The Air Investigation Branch has recently renewed its efforts and is working with Transport Canada to triage all the outstanding recommendations and examine potential solutions to address the underlying safety deficiencies. The TSB will also renew and sustain its outreach efforts in 2016-17 to try and convince industry stakeholders to take appropriate safety actions to mitigate these outstanding safety risks. Furthermore, the TSB will launch phase 2 of an in-depth Safety Issues Investigation into the risks that persist in air taxi operations across Canada.

A number of the performance targets have been reviewed and adjusted to reflect more realistic expectations in light of the challenges to be addressed and the time lag required to clear out older investigations in-progress from previous years.

Almost 50% of the Air Occurrence Investigations workforce will be eligible for retirement within the next five years. For the next few years, a particular focus will therefore be placed on succession planning, proactive staffing, investments in training, and knowledge transfer to ensure that the TSB maintains an adequate capacity to deliver on its mandate with respect to aviation safety.

## Program 1.2: Marine Occurrence Investigations

### Description

The Marine Occurrence Investigations program is governed by the *Canadian Transportation Accident Investigation and Safety Board Act*, the *Transportation Safety Board Regulations*, and the *Casualty Investigation Code* of the International Maritime Organization. Under this program, the TSB conducts independent investigations into selected marine transportation occurrences in Canada, and in certain circumstances internationally to identify causes and contributing factors. This program includes the publication of investigation reports, the formulation and monitoring of recommendations and other safety communications, as well as the conduct of outreach activities to advocate for changes to operating practices, equipment, infrastructure, and legislation to advance transportation safety. The Marine Occurrence Investigations program also includes the fulfillment of specific Government of Canada's obligations related to transportation safety under conventions of the International Maritime Organization and other international agreements.

#### Budgetary Financial Resources (dollars)

| 2016-17 Main Estimates | 2016-17 Planned Spending | 2017-18 Planned Spending | 2018-19 Planned Spending |
|---|---|---|---|
| 5,089,370 | 5,241,795 | 5,156,371 | 5,156,371 |

#### Human Resources (FTEs)

| 2016–17 | 2017–18 | 2018–19 |
|---|---|---|
| 37 | 37 | 37 |

#### Performance Measurement

| Program Expected Results | Performance Indicators | Targets | Date to be achieved |
|---|---|---|---|
| Marine occurrence investigations are efficient | Average time for completing investigation reports | 450 days | March 31, 2017 |
| | Percentage of investigations completed within the published target time | 85% | March 31, 2017 |
| Safety deficiencies in the marine industry are | Percentage of responses to recommendations assessed | 85% | March 31, 2017 |

| Program Expected Results | Performance Indicators | Targets | Date to be achieved |
|---|---|---|---|
| addressed | as Fully Satisfactory (since TSB's creation) | | |
| | Percentage of safety advisories on which safety actions have been taken | 60% | March 31, 2017 |
| | Average time recommendations have been outstanding (active and dormant recommendations) | 7 years | March 31, 2018 |
| Marine transportation system is safer | Marine accident rate (over 10-year period) | Reduction in accident rate | March 31, 2017 |
| | Number of fatal marine accidents (over 10-year period) | Reduction in number of fatalities | March 31,2017 |

## Planning Highlights

For 2016-17, the Marine Occurrence Investigations program continues to be well-positioned to achieve the expected results and agreed upon targets mainly due to the highly skilled workforce, effective project management and regular follow-up with stakeholders.

The target for the *percentage of responses to recommendations assessed as fully satisfactory* was increased to 85% in 2014-15 in anticipation that Transport Canada's new *Fishing Vessel Safety Regulations* would address a number of outstanding TSB recommendations. However, these regulations have again been delayed and it is unclear when they may be finalized. For 2016-17, the target will remain the same and the TSB will renew its efforts to encourage action on this key file. The target for the *percentage of investigations completed within the published target time* has been increased from 75 to 85%. All other targets remain the same as in 2015-16.

The most significant challenge for the Marine Occurrence Investigations program remains the recruitment and retention of a qualified workforce. As it takes a few years of employment with the TSB to develop a highly skilled investigator, the Marine Investigations Branch takes proactive staffing and training measures to minimize the impact of employee turnover in order to maintain a high level of performance.

## Program 1.3: Rail Occurrence Investigations

### Description

The Rail Occurrence Investigations program is governed by the *Canadian Transportation Accident Investigation and Safety Board Act* and the *Transportation Safety Board Regulations*. Under this program, the TSB conducts independent investigations into selected rail transportation occurrences in Canada to identify causes and contributing factors. This program includes the publication of investigation reports, the formulation and monitoring of recommendations and other safety communications, as well as the conduct of outreach activities to advocate for changes to operating practices, equipment, infrastructure, and legislation to advance transportation safety. The Rail Occurrence Investigations program also includes the provision of assistance, upon request, to the provinces for the investigation of short-line railway occurrences under provincial jurisdiction.

### Budgetary Financial Resources (dollars)

| 2016–17<br>Main Estimates | 2016–17<br>Planned Spending | 2017–18<br>Planned Spending | 2018–19<br>Planned Spending |
|---|---|---|---|
| 5 868 736 | 5 868 524 | 5 868 317 | 5 868 317 |

### Human Resources (FTEs)

| 2016–17 | 2017–18 | 2018–19 |
|---|---|---|
| 40 | 40 | 40 |

### Performance Measurement

| Program Expected Results | Performance Indicators | Targets | Date to be achieved |
|---|---|---|---|
| Rail occurrence investigations are efficient | Average time for completing investigation reports | 450 days | March 31, 2017 |
| | Percentage of investigations completed within the published target time | 75% | March 31, 2018 |
| Safety deficiencies in the rail industry are addressed | Percentage of responses to recommendations assessed as Fully Satisfactory (since TSB's creation) | 85% | March 31, 2017 |

| Program Expected Results | Performance Indicators | Targets | Date to be achieved |
|---|---|---|---|
| | Percentage of safety advisories or which safety actions have been taken | 75% | March 31, 2017 |
| | Average time recommendations have been outstanding (active and dormant recommendations) | 7 years | March 31, 2018 |
| Rail transportation system is safer | Rail accident rate (over 10-year period) | Continue downward trend in accident rate | March 31, 2017 |
| | Number of fatal rail accidents (over 10-year period) | Reduction in number of fatalities | March 31, 2017 |

## Planning Highlights

Over the past few years, the TSB has faced challenges in achieving performance targets for the Rail Occurrence Investigations program due to the significant level of effort required for the Lac-Mégantic investigation and the increased workload associated with the increase in rail safety awareness and higher public expectations that followed in the aftermath of this accident. As the situation is now returning to a more normal state, the TSB should be able to catch-up on the accumulated work and improve its performance results in 2016-17.

Following the various TSB safety communications over the past two years, the regulator and the railway industry have initiated many of the required safety actions. However, significant rail safety issues remain unresolved. The TSB must therefore continue to make compelling arguments that will influence the regulator and industry to take additional safety actions.

In 2016-17, the TSB will also continue its work with key stakeholders towards the implementation of locomotive voice and video recorders.

Effective recruitment and training of new investigators remains a challenge for the TSB in 2016 - 17. With a significant number of rail personnel who are eligible to retire within 24 months, effective succession planning and proactive staffing will remain a priority. Priority will also continue to be placed on investigator training and the transfer of knowledge to new investigators.

## Program 1.4: Pipeline Occurrence Investigations

### Description

The Pipeline Occurrence Investigations program is governed by the *Canadian Transportation Accident Investigation and Safety Board Act* and the *Transportation Safety Board Regulations*. Under this program, the TSB conducts independent investigations into selected pipeline occurrences under federal jurisdiction within Canada to identify causes and contributing factors. This program includes the publication of investigation reports, the formulation and monitoring of recommendations and other safety communications, as well as the conduct of outreach activities to advocate for changes to operating practices, equipment, infrastructure, and legislation to advance transportation safety.

### Budgetary Financial Resources (dollars)

| 2016-17 Main Estimates | 2016-17 Planned Spending | 2017-18 Planned Spending | 2018-19 Planned Spending |
|---|---|---|---|
| 277,784 | 286,104 | 281,441 | 281,441 |

### Human Resources (FTEs)

| 2016–17 | 2017–18 | 2018–19 |
|---|---|---|
| 3 | 3 | 3 |

### Performance Measurement

| Program Expected Results | Performance Indicators | Targets | Date to be achieved |
|---|---|---|---|
| Pipeline occurrence investigations are efficient | Average time for completing investigation reports | 450 days | March 31, 2018 |
| | Percentage of investigations completed within the published target time | 100% | March 31, 2018 |
| Safety deficiencies in the pipeline industry are addressed | Percentage of responses to recommendations assessed as Fully Satisfactory (since TSB's creation) | 100% | All already achieved |
| | Percentage of safety | 75% | March 31, 2017 |

| Program Expected Results | Performance Indicators | Targets | Date to be achieved |
|---|---|---|---|
| | advisories on which safety actions have been taken | | |
| | Average time recommendations have been outstanding (active and dormant recommendations) | Not applicable* | Not applicable* |
| Pipeline system is safer | Pipeline accident rate (over 10-year period) | Reduction in accident rate | March 31, 2017 |
| | Number of fatal pipeline accidents (over 10-year period) | No fatalities | March 31, 2017 |

* There are no outstanding recommendations.

## Planning Highlights

In 2015-16, the implementation of the on-line event reporting system (OERS), in collaboration with the National Energy Board, was an initial step towards reviewing and redefining the processes and protocols for pipeline investigations. The TSB will continue to review and adjust, where necessary, its investigation processes to ensure that pipeline occurrence investigations are conducted in a modern and efficient manner.

Two outstanding old pipeline investigations were completed in 2015-16 and there are no pipeline investigations currently underway. Efforts are being placed on the training of investigators to ensure the TSB is ready to undertake the investigation of new occurrences. The TSB is therefore well-positioned to achieve the expected results and agreed upon targets for the Pipeline Occurrence Investigations program in future.

At this time, there are no outstanding pipeline recommendations, as all have been assessed as fully satisfactory. However, various outreach activities will be identified and implemented to ensure a high level of pipeline safety awareness.

# Internal Services

## Description

Internal Services are groups of related activities and resources that are administered to support the needs of programs and other corporate obligations of an organization. Internal services include only those activities and resources that apply across an organization, and not those provided to a specific program. The groups of activities are Management and Oversight Services; Communications Services; Legal Services; Human Resources Management Services; Financial Management Services; Information Management Services; Information Technology Services; Real Property Services; Materiel Services; and Acquisition Services.

### Budgetary Financial Resources (dollars)

| 2016–17 Main Estimates | 2016–17 Planned Spending | 2017–18 Planned Spending | 2018–19 Planned Spending |
|---|---|---|---|
| 5,720,897 | 5,892,236 | 5,796,212 | 5,796,212 |

### Human Resources (FTEs)

| 2016–17 | 2017–18 | 2018–19 |
|---|---|---|
| 51 | 51 | 51 |

## Planning Highlights

In 2016-17, the Internal Services program will continue to implement ways to more effectively deliver programs and services in support of the four investigation programs. A key priority remains enhancing the TSB's information management capacity. The Internal Services program will continue to monitor metrics to assess whether information is being effectively managed and to assist employees by providing training and guidance. The TSB will work with Library and Archives Canada to review and update its retention and disposal schedules for records of enduring business value. A related information management priority in 2016-17 will be reviewing opportunities to increase the amount of information and data that the TSB releases as part of the Open Government initiative. As part of this initiative, Internal Services personnel will review occurrence data and document decisions on what information cannot be made available publicly and why.

Other Internal Services priorities for 2016-17 include:

- Implementing various initiatives in response to the results of the Public Service Employee Survey;
- Supporting the recruitment and development of investigators as the TSB continues to face a period of high turnover due to employee retirements;
- Continuing to build on the performance management framework to ensure strong linkages exist between organizational performance, individual employee performance objectives/evaluations, and learning and development;
- Monitoring government-wide initiatives relating to internal services and systems, and implementing changes in accordance with prescribed schedules; and
- Exploring available tools and technology to identify where these can assist investigation operations to be more effective, such as developing and implementing an on-line occurrence reporting tool and improving the safety analysis tool.

# Section III: Supplementary Information

## Future-Oriented Condensed Statement of Operations

The Future-Oriented Condensed Statement of Operations provides a general overview of the Transportation Safety Board's operations. The forecast of financial information on expenses and revenues is prepared on an accrual accounting basis to strengthen accountability and to improve transparency and financial management.

Because the Future-Oriented Condensed Statement of Operations is prepared on an accrual accounting basis, and the forecast and planned spending amounts presented in other sections of the Report on Plans and Priorities are prepared on an expenditure basis, amounts may differ.

A more detailed Future-Oriented Statement of Operations and associated notes, including a reconciliation of the net cost of operations to the requested authorities, are available on the TSB website[viii].

**Future-Oriented Condensed Statement of Operations**
**For the Year Ended March 31, 2016**
**(dollars)**

| Financial Information | 2015–16 Forecast Results | 2016–17 Planned Results | Difference (2016–17 Planned Results minus 2015–16 Forecast Results) |
|---|---|---|---|
| Total expenses | 36,464,000 | 36,112,000 | -1.0% |
| Total revenues | 35,000 | 35,000 | - |
| Net cost of operations | 36,429,000 | 36,077,000 | -1.0% |

As shown in the table above, the TSB is projecting a net cost of operations of $36 million for 2016-17. This projection is based on funding requested in the 2016–17 Main Estimates, plus estimated unused funding to be carried forward from 2015–16, and compensation adjustments for terminable allowances. On an accrual accounting basis, the TSB is forecasting a 1% variation in the net cost of operations expenses between years. The decrease in expenses in 2016-17 compared to 2015-16 is mainly due to anticipating a lower amount of unused funding carried forward from the prior year.

## Supplementary Information Tables

The supplementary information tables listed in the 2016–17 Report on Plans and Priorities are available on the TSB website[ix].

# Section IV: Organizational Contact Information

Additional information about the Transportation Safety Board of Canada and its activities is available on the TSB website[x] or by contacting us at:

Transportation Safety Board of Canada
Place du Centre
200 Promenade du Portage, 4th Floor
Gatineau, Quebec K1A 1K8

E-mail: communications@bst-tsb.gc.ca
Social media: social@bst-tsb.gc.ca
Toll Free: 1-800-387-3557
Fax: 819-997-2239

# Appendix: Definitions

**Appropriation:** Any authority of Parliament to pay money out of the Consolidated Revenue Fund.

**budgetary expenditures:** Operating and capital expenditures; transfer payments to other levels of government, organizations or individuals; and payments to Crown corporations.

**Departmental Performance Report:** Reports on an appropriated organization's actual accomplishments against the plans, priorities and expected results set out in the corresponding Reports on Plans and Priorities. These reports are tabled in Parliament in the fall.

**full-time equivalent:** A measure of the extent to which an employee represents a full person-year charge against a departmental budget. Full-time equivalents are calculated as a ratio of assigned hours of work to scheduled hours of work. Scheduled hours of work are set out in collective agreements.

**Government of Canada outcomes:** A set of 16 high-level objectives defined for the government as a whole, grouped in four spending areas: economic affairs, social affairs, international affairs and government affairs.

**Management, Resources and Results Structure:** A comprehensive framework that consists of an organization's inventory of programs, resources, results, performance indicators and governance information. Programs and results are depicted in their hierarchical relationship to each other and to the Strategic Outcome(s) to which they contribute. The Management, Resources and Results Structure is developed from the Program Alignment Architecture.

**non-budgetary expenditures:** Net outlays and receipts related to loans, investments and advances, which change the composition of the financial assets of the Government of Canada.

**performance:** What an organization did with its resources to achieve its results, how well those results compare to what the organization intended to achieve, and how well lessons learned have been identified.

**performance indicator:** A qualitative or quantitative means of measuring an output or outcome, with the intention of gauging the performance of an organization, program, policy or initiative respecting expected results.

**performance reporting:** The process of communicating evidence-based performance information. Performance reporting supports decision making, accountability and transparency.

**planned spending:** For Reports on Plans and Priorities (RPPs) and Departmental Performance Reports (DPRs), planned spending refers to those amounts that receive Treasury Board approval by February 1. Therefore, planned spending may include amounts incremental to planned expenditures presented in the Main Estimates.

A department is expected to be aware of the authorities that it has sought and received. The determination of planned spending is a departmental responsibility, and departments must be able to defend the expenditure and accrual numbers presented in their RPPs and DPRs.

**plans:** The articulation of strategic choices, which provides information on how an organization intends to achieve its priorities and associated results. Generally a plan will explain the logic behind the strategies chosen and tend to focus on actions that lead up to the expected result.

**priorities:** Plans or projects that an organization has chosen to focus and report on during the planning period. Priorities represent the things that are most important or what must be done first to support the achievement of the desired Strategic Outcome(s).

**program:** A group of related resource inputs and activities that are managed to meet specific needs and to achieve intended results and that are treated as a budgetary unit.

**Program Alignment Architecture:** A structured inventory of an organization's programs depicting the hierarchical relationship between programs and the Strategic Outcome(s) to which they contribute.

**Report on Plans and Priorities:** Provides information on the plans and expected performance of appropriated organizations over a three-year period. These reports are tabled in Parliament each spring.

**results:** An external consequence attributed, in part, to an organization, policy, program or initiative. Results are not within the control of a single organization, policy, program or initiative; instead they are within the area of the organization's influence.

**statutory expenditures:** Expenditures that Parliament has approved through legislation other than appropriation acts. The legislation sets out the purpose of the expenditures and the terms and conditions under which they may be made.

**Strategic Outcome:** A long-term and enduring benefit to Canadians that is linked to the organization's mandate, vision and core functions.

**sunset program:** A time-limited program that does not have an ongoing funding and policy authority. When the program is set to expire, a decision must be made whether to continue the program. In the case of a renewal, the decision specifies the scope, funding level and duration.

**target:** A measurable performance or success level that an organization, program or initiative plans to achieve within a specified time period. Targets can be either quantitative or qualitative.

**voted expenditures:** Expenditures that Parliament approves annually through an Appropriation Act. The Vote wording becomes the governing conditions under which these expenditures may be made.

**whole-of-government framework:** Maps the financial contributions of federal organizations receiving appropriations by aligning their Programs to a set of 16 government-wide, high-level outcome areas, grouped under four spending areas.

# Endnotes


i. *Canadian Transportation Accident Investigation and Safety Board Act*: http://laws-lois.justice.gc.ca/eng/acts/C-23.4/index.html

ii. **Transportation Safety Board of Canada**, http://www.tsb.gc.ca

iii. **Transportation Safety Board of Canada**, http://www.tsb.gc.ca/eng/publications/index.asp

iv. **2018–19 Main Estimates**, http://www.fin.gc.ca/pub/est-pre/2018-19/pdf/me-bpd-eng.pdf

v. **Prime Minister of Canada's website**, http://pm.gc.ca/eng/mandate-letters-ministers

vi. **Whole-of-government framework**, http://www.fin.gc.ca/pub/mgln-rpp-eng.asp

vii. **2018–19 Main Estimates**, http://www.fin.gc.ca/pub/est-pre/2018-19/pdf/me-bpd-eng.pdf

viii. **Transportation Safety Board of Canada**, http://www.tsb.gc.ca/eng/publications/index.asp

ix. **Transportation Safety Board of Canada**, http://www.tsb.gc.ca/eng/publications/index.asp

x. **Transportation Safety Board of Canada**, http://www.tsb.gc.ca/eng/